DATA VERIFICATION OF THE OU-4B AND OU-5 SOIL INVESTIGATION
METEORIC WATER MOBILITY PROCEDURE (MWMP) SAMPLES
COLLECTED AT THE ANACONDA COPPER MINE SITE IN YERINGTON, NEVADA
ON DECEMBER 18, 2019

Laboratory: ACZ Laboratories, Inc.
Samples:

Field Sample Identification	Date Sample Prepared	SDG	Parameters Examined
STSB01_6-15	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB01_15-25	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB01_33-38	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB01_43-48	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB11_0.5-3	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB11_6-15	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB11-FD_0.5-3 (Field Duplicate of STSB11_0.5-3)	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB20_0.5-3	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra
STSB20_6-15	12/18/2019	L56668	M^1, M^2, Hg, CN, Cl, F, SO_4, N, TKN, ALK, TDS, ^{226}Ra, ^{228}Ra

Parameters & Methods:

M^1 - ICP Metals (specifically, aluminum, barium, boron, calcium, iron, lithium, magnesium, phosphorus, potassium, sodium, strontium, tin, and titanium) by SW-846 Method 6010D.
M^2 - ICP/MS Metals (specifically, antimony, arsenic, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium, thorium, uranium, vanadium, and zinc) by SW-846 Method 6020B.
Hg - Mercury by SW-846 Method 7470.
CN - Cyanide, Weak Acid Dissociable (WAD) by Standard Method 4500-CN I.
Cl - Chloride by Standard Method 4500-Cl E.
F - Fluoride by Standard Method 4500-F C.
SO_4 - Sulfate by ASTM Method D516-07.
N - Nitrate Nitrogen, Nitrite Nitrogen, and Nitrate/Nitrite Nitrogen by US EPA Method 353.2.

TKN - Total Kjeldahl Nitrogen by US EPA Method 351.2.
ALK - Total Alkalinity, Bicarbonate Alkalinity, Carbonate Alkalinity, and Hydroxide Alkalinity as $CaCO_3$ by Standard Method 2320B.
TDS - Total Dissolved Solids by Standard Method 2540C.
^{226}Ra - Radium-226 by US EPA Method 903.1 (modified).
^{228}Ra - Radium-228 by SW-846 Method 9320.

Items Reviewed
Holding Times
Chain-of-Custody and Case Narrative
Blank Results
MS/MSD Results
LCS Results
Laboratory and Field Duplicate Results
Chemical Yield

Qualifier Summary

Analyte(s)	SDG(s)	Sample(s)	Validation Qualifier(s)	Reason(s) for Qualification
nitrate nitrogen, nitrite nitrogen, and nitrate/nitrite nitrogen	L56668	All samples	J/UR	1 – Grossly exceeded holding time
boron	L56668	STSB01_33-38, STSB01_43-48, STSB11-FD_0.5-3, and STSB20_6-15	UJ	2 – Method blank contamination
cobalt	L56668	STSB01_43-48	UJ	2 – Method blank contamination
nickel	L56668	STSB01_33-38 and STSB20_6-15	UJ	2 – Method blank contamination
sodium	L56668	STSB11_0.5-3, STSB11_6-15, and STSB20_0.5-3	UJ	2 – Method blank contamination
radium 226	L56668	STSB01_33-38, STSB01_43-48, STSB11_0.5-3, STSB11-FD_0.5-3, STSB20_0.5-3, and STSB20_6-15	UJ	2 – Method blank contamination
phosphorus and WAD cyanide	L56668	All samples	UJ	4L – Low MS/MSD recoveries
uranium	L56668	STSB11_0.5-3 and STSB11-FD_0.5-3	J	8 – Field duplicate imprecision

Analyte(s)	SDG(s)	Sample(s)	Validation Qualifier(s)	Reason(s) for Qualification
fluoride	L56668	STSB01_15-25, STSB11_0.5-3, STSB11_6-15, STSB11-FD_0.5-3, and STSB20_0.5-3	J	9 – Result may be impacted from method blank contamination

Quantitation of Results: Based on standard project reporting requirements, all positive results reported at concentrations greater than the method detection limit but less than the reporting limit were qualified as estimated and have been flagged "J" on the data tables. (Valid Reason Code: T)

Based on standard project reporting requirements, all radium-226 and radium-228 results reported at concentrations less than the method detection limit were qualified as "not-detected" and have been flagged "U" on the data tables. (Valid Reason Code: 9)

Prepared by: Jared K. Acker
Reviewed by: Konstadina Vlahogiani
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